

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) Solid ion conductor, characterized in that it has a garnet-like crystal structure and that it has a higher ion conductivity than  $3.4 \times 10^{-6}$  S/cm.
2. (Original) Solid ion conductor, characterized in that it has a garnet-like crystal structure and that it has a stoichiometric composition which is formally derived by aliovalent substitution of  $\text{Li}_5\text{La}_3\text{M}_2\text{O}_{12}$  in which M is Nb or Ta.
3. (Original) Solid ion conductor, characterized in that it has a garnet-like crystal structure and that it has a stoichiometric composition  $\text{L}_{5+x}\text{AyG}_z\text{M}_2\text{O}_{12}$ , wherein L is in each case independently an arbitrary preferably monovalent cation, A is in each case independently a monovalent, divalent, trivalent or tetravalent cation, G is in each case independently a monovalent, divalent, trivalent or tetravalent cation M is in each case independently a trivalent, tetravalent or pentavalent cation,  $0 < x \leq 2$ ,  $0 \leq y \leq 3$ ,  $0 \leq z \leq 3$  and wherein 0 can be partially or completely replaced by divalent and/or trivalent anions such as e.g.  $\text{N}^{3-}$ .
4. (Currently Amended) Solid ion conductor as claimed in ~~any of the previous claims~~ claim 1, wherein the stoichiometric composition is



and wherein

$$0 < x \leq 1,$$

L is a monovalent alkali metal cation,

A is a divalent metal cation,

G is a trivalent cation and

M is a pentavalent cation.

5. (Currently Amended) Solid ion conductor as claimed in claim 3 or 4,  
wherein L is selected from Li, Na and K can in each case be the same or different.

6. (Original) Solid ion conductor as claimed in claim 5, wherein L is Li.

7. (Currently Amended) Solid ion conductor as claimed in ~~one of the~~  
~~claims 3 to 6~~ claim 3, wherein A is selected from divalent cations preferably alkaline  
earth metal ions.

8. (Currently Amended) Solid ion conductor as claimed in ~~any of claims 3 to 7~~  
claim 3, wherein M is selected from transition metal ions.

9. (Currently Amended) Solid ion conductor as claimed in ~~any of claims 3 to 8~~  
claim 3, wherein A is selected from Ca, Sr and/or Ba and wherein M is selected from Nb  
and Ta.

10. (Currently Amended) Solid ion conductor as claimed in claim 8 or 9,  
wherein A is selected from Sr and Ba and wherein M is Ta.

11. (Currently Amended) Solid ion conductor as claimed in ~~any of claims 3 to 10~~  
claim 3, characterized in that it is stable towards elemental lithium at lithium activities  
corresponding to a voltage of 5 V.

12. (Currently Amended) Process for producing a solid ion conductor as  
claimed in ~~one of the previous claims~~ claim 1, characterized in that salts and/or oxides of  
L, A, G and M are reacted together.

13. (Original) Process as claimed in claim 12, characterized in that the reaction takes place in a solid phase reaction.

14. (Currently Amended) Process as claimed in ~~any of claims 12 or 13~~ claim 12 for the production of a solid ion conductor ~~as claimed in claim 4~~ wherein the stoichiometric composition is



and wherein

$0 < x < 1$ ,

L is a monovalent alkali metal cation,

A is a divalent metal cation,

G is a trivalent cation and

M is a pentavalent cation,

characterized in that L and A are used in the form of nitrates, carbonates or hydroxides and are reacted with  $\text{G}_2\text{O}_3$  and  $\text{M}_2\text{O}_5$ .

15. (Currently Amended) Process as claimed in ~~any of claims 12 to 14~~ claim 12, which comprises the following steps:

- (a) mixing the starting materials and ball-milling, preferably using zirconium oxide balls in 2-propanol,
- (b) heating the mixture from (a) in air for 2-10 h to 400-1000°C;
- (c) ball-milling, preferably using zirconium balls in 2-propanol;
- (d) pressing the mixture with isostatic pressure into pellets; and
- (e) sintering the pellets covered with a powder of the same composition for 10-50 h at 700-1200°C.

16. (Original) Process as claimed in claim 15, wherein in step (b) the mixture is heated for 6 h to 700°C; and in step (e) the pellets are sintered for 24 h at 900°C.

17. (Original) Use of a solid ion conductor as claimed in ~~any of claims 1 to 11~~  
claim 1 in batteries, accumulators, supercaps, fuel cells, sensors and/or electrochromic devices such as windows, screens and facades.

18. (Currently Amended) Use as claimed in claim ~~18~~ 17, wherein the solid ion conductor is used in the form of pellets, as a thin layer, in a crystalline or amorphous foil.